UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/526,192	03/15/2000	Motoki Kato	450100-02056	9413

20999 7590 04/28/2004

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER	
TRAN, THAI Q	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/526,192	Applicant(s) KATO, MOTOKI	
	Examiner Thai Tran	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-78* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Feb. 09, 2004 have been fully considered but they are not persuasive.

In re pages 19-20, applicant argues that the rejection of claims 1-24 and 30-34 under 35 U.S.C. §102(e) be withdrawn because Cornog et al fails to teach the invention of generating random access points in a predefined format, rather than the conversion of formats in Cornog et al and because the random access points are not generated and distinguished in accordance with the packet identification information.

In response, the examiner respectfully disagrees. Cornog et al discloses in col. 5, lines 14-20 that "If the **MPEG stream is reformatted to allow random access, or a stream is captured in a format that allows random access**, an index may be created (66). The index may be used to find the compressed video data which corresponds to a particular image in the video sequence and to determine what compressed video data should be fed to the MPEG decoder to display the particular image". It is noted that claims recite "**predefined format**". The claimed predefined format is anticipated by the reformatted video stream or the format of video stream that allows random access of Cornog et al. Thus, Cornog et al does indeed disclose the claimed "**predefined format**".

Additionally, Cornog et al discloses in col. 5, line 21 to col. 6, line 7 the format of the index including offset of MPEG headers. The MPEG headers of Cornog et al anticipate the claimed packet identification information because MPEG stream are formatted in packets. Therefore, Cornog et al does disclose the claimed that the random

access points are generated and distinguished in accordance with the packet identification information (offset of the MPEG headers of Cornog).

In re page 21, applicant argues that claim 25 includes limitations similar to those noted above, and therefore is allowable for the same reasons noted above with respect to claim 1 and; furthermore, claims 26-29 depend from independent claim 25, and are therefore allowable for this reason alone, and additionally as presenting independently patentable combination in and of their own right.

In response, as discussed above with respect to claim 1, Cornog et al discloses all the claimed limitations of claim 1.

In re pages 21-22, applicant states that claims 35-78 are allowable for the same reasons noted above with respect to claim 1.

In response, as discussed above with respect to claim 1, Cornog et al discloses all the claimed limitations of claim 1.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-24 and 30-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Cornog et al (US 6,337,880 B1) as set forth in paragraph #6 of the last Office Action.

Regarding claim 1, Cornog et al discloses a recording apparatus (Fig. 1 and col. 7, lines 50-63) for recording video data acquired from a transport stream that includes one or more packetized video data streams of a predefined format, each having packet identification information, said recording apparatus comprising:

detecting means (col. 4, lines 1-22) for detecting at least one random-access point of said one of said one or more packetized video data streams of said predefined format;

analyzing means (col. 5, lines 14-27) for obtaining an address of said random-access point and for distinguishing packets having said random-access point in accordance with packet identification information included in said one or more packetized video data streams of said predefined format;

data-base creation means (col. 5, lines 14-27) for creating a data base including one or more lists of address of said random access point for each of said packet identification information, whereby the lists of random-access points are distinguished from each other by the packet identification information; and

recoding means (col. 7, lines 50-63) for recording said data base separately from said video data on a recording medium.

Regarding claim 2, Cornog et al discloses the claimed wherein said detection means detects said at least one random-access point according to a video sequence_header_code in said video data (col. 3, lines 30-37).

Regarding claim 3, Cornog et al discloses the claimed extracting means (time codes disclosed in col. 7, lines 50-59); and wherein said data-base creation means (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-59).

Regarding claim 4, Cornog et al discloses the claimed wherein said analyzing means distinguishes programs according to a program map table (col. 3, lines 52-54).

Regarding claim 5, Cornog et al discloses the claimed wherein said data base creation means creates a data base for each of a plurality of video versions of a particular video program (fast forward and fast reverse disclosed in col. 7, lines 50-63).

Method claims 6-10 are rejected for the same reasons as discussed in apparatus claims 1-5 above.

Regarding claim 11, Cornog et al discloses a reproducing apparatus (Fig. 1 and col. 7, lines 50-63) for reproducing video data from a transport stream recorded on a recording medium, said transport stream comprising one or more packetized video data streams of a predefined format, each having packet identification information, and a random-access information table including one or more lists of addresses of random-access points for each of said packet identification information, with a separate random-access information tale being generated and stored on said recording medium corresponding to each of one or more video programs of said predefined format, whereby the lists of random access points are distinguished from each other by said packet identification information comprising:

reproducing means (col. 7, lines 50-63) for reproducing from said recording medium one or more of said video programs of said predefined format and said corresponding random-access information table; and

control means (col. 7, lines 50-63) for controlling, according to said random-access information table, an access point during a random-access playback operation.

Regarding claim 12, Cornog et al discloses the claimed selecting means (col. 3, lines 27-47) for selecting one or more of said video programs from video programs included in said video data.

Regarding claim 13, Cornog et al discloses the claimed wherein each of said random-access information tables is stored on said recording medium as a file separately from said video data (col. 7, lines 50-63).

Regarding claim 14, Cornog et al discloses the claimed wherein said addresses are indicative of an address of said recording medium corresponding to said one or more random-access points (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-59).

Regarding claim 15, Cornog et al discloses the claimed wherein said addresses include time stamp information indicative of a playback time corresponding to each of said random-access points (time codes disclosed in col. 7, lines 55-59).

Regarding claim 16, Cornog et al discloses the claimed wherein said transport stream is defined by an MPEG standard (col. 3, lines 27-30).

Regarding claim 17, Cornog et al discloses the claimed wherein addresses are formed for each of a plurality of versions of a video program (fast forward and fast reverse disclosed in col. 7, lines 50-63).

Method claims 18-24 are rejected for the same reasons as discussed in apparatus claims 11-17 above.

Recording medium claims 30-34 are rejected for the same reasons as discussed in apparatus claims 1-5 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornog et al (US 6,337,880 B1) as set forth in paragraph #8 of the last Office Action.

Regarding claim 25, Cornog et al discloses all the claimed limitations as discussed in claim 1 above except for providing that these steps are performed by a computer program.

Cornog et al also teaches that computer which inherently has computer program can be used for editing video signal (col. 1, lines 13-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the computer program as taught by Cornog et al into the editing

system disclosed in col. 7, lines 50-59 of Cornog et al in order to facilitate the editing process.

Regarding claim 26, Cornog et al discloses the claimed wherein said detection means detects said at least one random-access point according to a video sequence_header_code in said video data (col. 3, lines 30-37).

Regarding claim 27, Cornog et al discloses the claimed extracting means (time codes disclosed in col. 7, lines 50-59); and wherein said data-base creation means (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-59).

Regarding claim 28, Cornog et al discloses the claimed wherein said analyzing means distinguishes programs according to a program map table (col. 3, lines 52-54).

Regarding claim 29, Cornog et al discloses the claimed wherein a data base is created for each of a plurality of video versions of a particular video program (fast forward and fast reverse disclosed in col. 7, lines 50-63).

6. Claims 35-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeijs et al ('581) in view of Cornog et al (US 6,337,880 B1).

Regarding claim 35, Saeijs et al discloses an apparatus (Figs. 18-19) for recording on a recording medium video data acquired from a transport stream that includes a plurality of multiplexed video programs, each having packet identification information, comprising:

distinguishing means (col. 23, lines 4-13) for distinguishing each of said plurality of said video programs. However, Saeijs et al does not specifically discloses detecting means for detecting one or more random-access points of one or more of said video

programs of said video data of said predefined format; analyzing means for obtaining an address of said random-access points in said video data and for distinguishing packets having said random-access point in accordance with said packet identification information included in said one or more video programs of said predefined format; generating means for generating one or more lists of addresses of said random-access points for each of said packet identification information, whereby the lists of random-access points are distinguished from each other by the packet identification information; and recording means for recording said video data and said random-access information on said recording medium.

Cornog et al teaches an apparatus for indexing for motion video that is compressed using interframe and intraframe techniques having detecting means (col. 4, lines 1-22) for detecting at least one random-access point of said one of said one or more packetized video data streams of a predefined format; analyzing means (col. 5, lines 14-27) for obtaining an address of said random-access point and for distinguishing packets having said random-access point in accordance with packet identification information included in said one or more packetized video data streams of said predefined format; data-base creation means (col. 5, lines 14-27) for creating a data base including one or more lists of address of said random access point for each of said packet identification information, whereby the lists of random-access points are distinguished from each other by the packet identification information; and recoding means (col. 7, lines 50-63) for recording said data base separately from said video data

on a recording medium for decoding and display at appropriate points in the compressed bitstream to enable random access to each intraframe compressed image.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of indexing motion video that is compressed using interframe and intraframe techniques as taught by Cornog et al into Saeijs et al's system in order to reduce the time in accessing the desired video signal by using random access of Cornog et al.

Regarding claim 36, Cornog et al also discloses means for generating a file that includes said random-access information table separately from a file that includes said video data (col. 7, lines 50-63).

Regarding claim 37, Cornog et al discloses the claimed selecting means (col. 7, lines 50-63) for selecting one or more of said video programs from said video programs included in said video data for playback.

Regarding claim 38, Cornog et al discloses the claimed wherein said address information includes address information indicative of an address on said recording medium corresponding to one of said random-access points (col. 7, lines 50-63).

Regarding claim 39, Cornog et al discloses the claimed wherein said address information includes a time tamp indicative of a recording time corresponding to at least one of said random-access points (time codes disclosed in col. 7, lines 50-63).

Regarding claim 40, Saeijs et al and Cornog et al discloses the claimed wherein said transport stream is defined by an MPEG standard (col. 21, lines 20-26 of Saeijs et al and col. 5, lines 14-20 of Cornog et al).

Regarding claim 41, Cornog et al discloses the claimed wherein said detecting means detects each of said random-access points according to a corresponding random-access indicator included in a header of each of said plurality of video programs making up said video data (col. 3, lines 27-47).

Regarding claim 42, Cornog et al discloses the claimed wherein said distinguishing means distinguishes each of said video programs according to said packet identification information included in said video data and a program map table included in said video data (col. 3, lines 48-58).

Regarding claim 43, Cornog et al discloses the claimed wherein said distinguishing means further comprises version distinguishing means (col. 7, lines 50-63) for distinguishing a plurality of version of at least one of said plurality of multiplexed video programs from each other; and wherein said generating means generating a random-access information table for each said version (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-63).

Method claims 44-52 are rejected for the same reasons as discussed in apparatus claims 35-43 above.

Regarding claim 53, the combination of Saeijs et al and Cornog et al discloses all the claimed limitations as discussed in claim 35 above and, additionally, Cornog et al discloses the claimed reproducing means (col. 7, lines 50-63) for reproducing from said recording medium one or more of said video programs and said corresponding random-access information table; and control means (col. 7, lines 50-63) for controlling,

according to said random-access information table, an access point during a random-access playback operation.

Regarding claim 54, Cornog et al discloses the claimed selecting means (col. 3, lines 27-47) for selecting one or more of said video programs from video programs included in said video data.

Regarding claim 55, Cornog et al discloses the claimed wherein each of said random-access information tables is stored on said recording medium as a file separately from said video data (col. 7, lines 50-63).

Regarding claim 56, Cornog et al discloses the claimed wherein said addresses are indicative of an address of said recording medium corresponding to said one or more random-access points (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-59).

Regarding claim 57, Cornog et al discloses the claimed wherein said addresses include time stamp information indicative of a playback time corresponding to each of said random-access points (time codes disclosed in col. 7, lines 55-59).

Regarding claim 58, Cornog et al discloses the claimed wherein said transport stream is defined by an MPEG standard (col. 3, lines 27-30).

Regarding claim 59, Cornog et al discloses the claimed wherein addresses are formed for each of a plurality of versions of a video program (fast forward and fast reverse disclosed in col. 7, lines 50-63).

Method claims 60-66 are rejected for the same reasons as discussed in apparatus claims 53-59 above.

Recording medium claims 67-72 are rejected for the same reasons as discussed in claims 53 and 55-59 above and.

Regarding claim 73, the combination of Saeijs et al and Cornog et al discloses all the claimed limitations as discussed in claim 35 above except for providing that these steps are performed by a computer program.

Cornog et al also teaches that computer which inherently has computer program can be used for editing video signal (col. 1, lines 13-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the computer program as taught by Cornog et al into the editing system disclosed in col. 7, lines 50-59 of Cornog et al in order to facilitate the editing process.

Regarding claim 74, Cornog et al discloses the claimed wherein each of said random-access information tables is stored on said recording medium as a file separately from said video data (col. 7, lines 50-63).

Regarding claim 75, Cornog et al discloses the claimed wherein said addresses are indicative of an address of said recording medium corresponding to said one or more random-access points (Figs. 2A-2B, col. 5, line 21 to col. 6, line 39 and col. 7, lines 50-59).

Regarding claim 76, Cornog et al discloses the claimed wherein said addresses include time stamp information indicative of a playback time corresponding to each of said random-access points (time codes disclosed in col. 7, lines 55-59).

Regarding claim 77, Cornog et al discloses the claimed wherein said transport stream is defined by an MPEG standard (col. 3, lines 27-30).

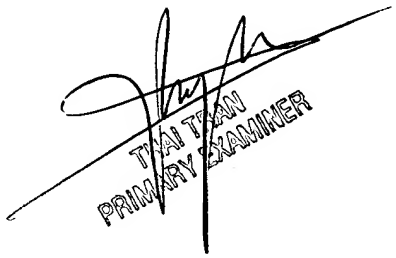
Regarding claim 78, Cornog et al discloses the claimed wherein addresses are formed for each of a plurality of versions of a video program (fast forward and fast reverse disclosed in col. 7, lines 50-63).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ